IN THE SPECIFICATION

Page 5, amend the paragraph beginning at line 31 as follows:

Somewhat opposite to the light-emitting device of Fig. 4, European Patent Publication ("EPP") 996,141 discloses a flat-panel CRT display whose light-emitting device contains getter material situated on a light-reflective anode layer which, in turn, overlies fluorescent material in the display's active region. An electrically conductive black matrix, typically in the form of stripes, is situated below the anode layer and thus below the getter material. EPP 996,141 discloses that the getter material can be a blanket layer situated over the entire anode layer. EPP 996,141 also discloses that the getter material can be patterned. When the black matrix consists of stripes, EPP 996,141 discloses that the getter material consists of stripes situated on the anode layer above the black matrix stripes or directly on the black matrix layer apparently in channels extending through the anode layer.

Page 7, amend the paragraph beginning at line 27 as follows:

The present invention furnishes a device having an advantageously located getter region. The present device can, for example, be embodied as a light-emitting device or an electron-emitting device. In either case, the getter region is normally situated at least partially in the active portion of the device. By having getter material in the device's active portion, a high getter surface area can be achieved without significantly increasing the device's overall lateral area.

Page 13, amend the paragraph beginning at line 8 as follows:

A fifth aspect of the invention involves utilizing a getter region to perform an electron-focusing ~~electron-focussing~~ function. Specifically, an electron-emitting structure generally suitable for use as an electron-emitting device of a flat-panel display contains a plate, an electron-emissive element overlying the plate, and a getter region overlying the plate. The getter is shaped, positioned, and controlled to focus electrons emitted by the electron-emissive element. Because the getter region performs an electron-focusing function and thus normally receives a focus potential, the getter region typically consists of

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electrically non-insulating material which is substantially electrically decoupled from a control electrode having an opening through which the electron-emissive element is exposed.

Page 16, amend the paragraph beginning at line 23 as follows:

Another selective technique entails thermally spraying getter material in an angled manner over part of the display component. In this case, it is typically desirable that the getter material accumulate on a primary surface of the component but not at the bottom of an opening that starts at the primary surface and extends partway through the component. To achieve this objective, the getter material is thermally sprayed over the primary surface at an average tilt angle which, as measured relative to a line extending generally perpendicular to the primary surface, is sufficiently large that the getter material accumulates only partway down into the opening. As a result, the getter material accumulates on the ~~an the~~ primary surface but not at the bottom of the opening.

Page 17, amend the paragraph beginning at line 6 as follows:

A relatively thick layer of getter material can normally be deposited by thermal spraying. When the component that receives the thermally sprayed getter material is a light-emitting device situated opposite an electron-emitting device in a flat-panel CRT display, the getter material typically overlies a light-blocking region having an opening in which a light-emissive region is at least partially situated. The light-blocking region typically enhances the display's performance by collecting electrons that scatter backward off the light-emissive region. Since the getter material overlies the light-blocking region, the getter material assists in collecting such backscattered electrons. The ability of the getter material to provide this assistance increases with increasing thickness (or height) of the getter material. Consequently, depositing getter material by thermal spraying facilitates manufacturing a high-performance flat-panel CRT display.

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Page 28, amend the paragraph beginning at line 9 as follows:

In another implementation, each getter region consists of largely only a single atomic element. The single atomic element can be any one ~~anyone~~ of the above-mentioned getter materials, i.e., any one ~~anyone~~ of the metals aluminum, titanium, vanadium, iron, zirconium, niobium, molybdenum, barium, tantalum, tungsten, and thorium. Each of titanium and zirconium is of special interest for the getter material in a ~~in~~ single-element implementation.

Page 31, amend the paragraph beginning at line 20 as follows:

Non-insulating layer 60 lies on top of light-emissive regions 56 and getter region 58. Layer 60 also covers parts of the sidewalls of light-blocking region 54 in light-emission openings 62. Although layer 60 is illustrated as a blanket layer, layer 60 is actually perforated. Microscopic pores (not shown), situated at random locations relative to one another, extend fully through layer 60.

Page 32, amend the paragraph beginning at line 18 as follows:

Black matrix 54 typically includes electrically insulating material in the form of black polymeric material such as blackened polyimide. For example, matrix 54 may consist of one or two patterned layers of blackened polyimide as described in U.S. Patent 6,046,539. Matrix ~~matrix~~ 54 may include chromium or/and chromium oxide. When suitably deposited, the chromium oxide may also be black. In a typical implementation, matrix 54 consists of a lower blackened polyimide layer, an intermediate chromium adhesion layer, and an upper polyimide layer which may be, but need not be, black. Alternatively, matrix 54 may be formed with graphite-based electrically conductive material, e.g., dispersed aqueous graphite, as described in U.S. Patent 5,858,619.

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Page 39, amend the paragraph beginning at line 17 as follows:

Additional region 66 typically has roughly the same lateral shape as black matrix 54. Consequently, openings extend through region 66 generally respectively in line with light-emission openings 62. Region 66 can also be provided in the light-emitting device of Figs. 5

and 6 and in the light-emitting devices of Figs. 7 and 9. ~~and 8.~~ In any event, the combination of black matrix 54, getter region 58, and additional region 66 forms a taller composite black matrix that further enhances the ability to collect electrons scattered backward off light-emissive regions 56.

Page 46, amend the paragraph beginning at line 1 as follows:

A blanket layer 58P of the desired getter material is formed over black matrix layer 54P to produce the structure shown in Fig. 10a. ~~Fig. 10c.~~ Getter layer 58P is formed in such a way as to have the porosity desired for getter region 58. Layer 58P may be formed as two or more sub-layers consisting of the same or different gettering material.

Page 51, amend the paragraph beginning at line 30 as follows:

Getter layer 58P can be formed by electrochemical deposition, e.g., electroplating or electroless plating, when black matrix layer 54P ~~layer 54~~ includes electrically conductive material along its exposed (upper) surface. Similar to electrophoretic/dielectrophoretic deposition, using electroplating to form getter layer 58P entails providing a suitable electrical potential to black matrix layer 54P. No electrical potential is applied to black matrix layer 54P (or getter layer 58P) when electroless plating is employed to create getter layer 58P.

Page 54, amend the paragraph beginning at line 9 as follows:

Non-insulating layer 60 is formed on light-emissive regions 56 and getter region 58 to complete the fabrication process of Fig. 10. See Fig. 10d in which layer 60 also extends partially over the sidewalls of black matrix 54. Layer 60 is created so as to have perforations in the form of microscopic pores (not shown) that enable gases to pass through layer 60. Evaporation of suitable electrically non-insulating material, normally a metal such as aluminum, is typically utilized to create layer 60. The structure of Fig. 10d constitutes the light-emitting device of Fig. 5.

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Page 57, amend the paragraph beginning at line 10 as follows:

Particles, each consisting of one or more atoms of the getter material impinge on black matrix 54 at an average tilt angle α to a line 68 extending perpendicular to faceplate 50 during the angled physical deposition operation. Arrows 70 in Figs. 11b and 11c indicate paths followed by particles of the getter material. One of paths 70 in each of Figs. 11b and 11c can represent a principal impingement axis ~~access~~ for the particles of getter material at any instant of time. Paths 70 are, on the average, at tilt angle α to vertical line 68.

Page 57, amend the paragraph beginning at line 21 as follows:

By using angled physical deposition, the total surface area of getter region 58 is normally increased for the reasons presented above in connection with the process of Fig. 10. Similar to what was stated above in connection with the process of Fig. 10, tilt angle α in the process of Fig. 11 is normally at least 10°, preferably at least 15°, more preferably at least 20°. For angled evaporation, angle α is typically 21 - 22°. The getter material can be changed during the angled deposition so that region 58 ~~region~~ consists of portions of different composition. On the other hand, the angled physical deposition can be performed with getter material consisting of largely only a single atomic element, as described above, to form an advantageous microstructure for region 58.

Page 64, amend the paragraph beginning at line 19 as follows:

Additional region 66 is formed over getter region 58 as shown in Fig. 14c. Additional region 66 ~~region 56~~ can be formed as two or more sub-regions (or sub-layers) of the same or different chemical composition. ~~The adhesion of getter region 58 to black matrix 54 can be improved by utilizing a low-melting-point material in the manner described above in connection with the process of Fig. 12.~~

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Page 66, amend the paragraph beginning at line 26 as follows:

A patterned layer 78 of polyimide is formed on adhesion layer 76 as shown in Fig. 15b. Precursor light-emission openings 62P extend through polyimide layer 78 and

underlying chromium layer 76 generally at the respective locations for light-emission openings 62. Polyimide layer 78 is typically created by forming a blanket layer of actinically polymerizable polyimide material on chromium layer 76 and polyimide layer 74, selectively exposing the blanket polyimide layer to suitable actinic radiation, e.g., UV light, through a reticle (not shown) having openings at the intended locations for openings 62P, and removing the unexposed polyimide material. Lower polyimide layer 74, intermediate chromium layer 76, and upper polyimide layer 78 form a precursor light-blocking black matrix <u>region 54P'.</u> ~~region 54'.~~

Page 67, amend the paragraph beginning at line 18 as follows:

A blanket precursor layer 58P' of the desired getter material is formed on the top surface of the structure. See Fig. 15c. Getter layer 58P' is situated on upper polyimide layer 78 and extends into light-emission openings 62P down to, and across, lower polyimide layer 74 at the bottoms of openings 62P. Getter layer 58P' can be formed in any of the ways described above for creating getter layer 58P in the process of Fig. 10. Similarly, layer 58P' may consist of any of the materials described above for <u>layer 58P.</u> ~~layer 58P'.~~

Page 68, amend the paragraph beginning at line 30 as follows:

Using a suitable photoresist mask (not shown), light-emission openings 62P are extended through sealing layer 80, getter layer 58P', and lower polyimide layer 74 to become light-emission openings 62 by performing an etch operation to remove the portions of layers 80, 58P', and 74 at the bottoms of openings 62P. See Fig. 15d. Layers 80, <u>58P',</u> ~~58P,~~ and 74 then respectively become sealing region 80A, getter region 58, and patterned lower polyimide layer 74A. The combination of lower polyimide layer 74A, adhesion layer 76, and upper polyimide layer 78 constitutes black matrix 54. The etch operation is typically performed anisotropically using one or more plasma etchants but can be performed isotropically.

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Page 70, amend the paragraph beginning at line 6 as follows:

A blanket protective (or isolation) layer 82, typically consisting of electrically insulating material, is formed on the top surface of the structure as indicated in Fig. 15e. Protective layer 82 is situated on sealing layer 80A and extends down into light-emission openings 62 along the sidewalls of sealing layer 80A to meet faceplate 50 at the bottoms of openings 62. Protective layer 82 also covers the edges of black matrix 54 and getter region 58 near the bottoms of openings 62. Further details on protective layers such as protective layer 82 are presented in Haven et al, U.S. patent application ~~Ser. No.~~ 09/087,785, filed 29 May 1998, now U.S. Patent 6,215,241 B1.

Page 82, amend the paragraph beginning at line 1 as follows:

The electron-emitting device, or backplate structure, in the FED of Figs. 19 and 20 consists of backplate 40, typically glass, and overlying layers/regions 42 which generally include electron-emissive regions 44 and raised section 46. More particularly, layers/regions 42 are formed with a lower electrically non-insulating region 100, a dielectric layer 102, a two-dimensional array of rows and columns of laterally separated sets of electron-emissive elements 104, a group of laterally separated generally parallel control electrodes 106, a patterned electrically non-conductive base focusing structure 108, an electrically non-insulating focus coating 110, and a getter region 112. Each set of electron-emissive elements 104 consists of multiple elements 104 and forms one of electron-emissive regions 44. Raised section 46 includes base focusing structure 108 and focus coating 110 which together form a system 108/110 for focusing electrons emitted by elements 104. In the example of Figs. 19 and 20, section 46 also includes getter region 112.

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Page 84, amend the paragraph beginning at line 31 as follows:

Base focusing structure 108 of ~~of the~~ electron-focusing system 108/110 formed with structure 108 and focus coating 110 lies on dielectric layer 102 and extends over portions of control electrodes 106 (outside the plane of Fig. 19). A two-dimensional array of rows and columns of focus openings 118 extend through (the thickness of) base focusing structure 108.

As a result, structure 108 is laterally shaped generally like a waffle or grid in the example of Figs. 19 and 20.

Page 89, amend the paragraph beginning at line 19 as follows:

In the electron-emitting device of Fig. 21, getter region 112 lies on base focusing structure 108 which thereby serves as a support region for getter region 112. Aside from this difference, region 112 overlies structure 108 and dielectric layer 102 in the same manner as in the electron-emitting device of Figs. 19 and 20. That is, region 112 in the electron-emitting device of Fig. 21 overlies at least part of the top surface of structure 108, normally extends at least partway over the sidewalls of structure 108 and into focus openings 118, and can even extend partway over layer 102 at the bottoms of openings 118 provided that region 112 does not get close enough to control electrodes 106 as to electrically interact with electrodes 106 when region 112 consists of electrically non-insulating material, especially electrically conductive material such as metal. Fig. 21 depicts an exemplary situation in which region 112 lies on substantially the entire top surface of structure 108 and extends partway down its sidewalls. Once again, openings extend through region 112 at least where electron-emissive regions 44 overlie backplate 40. ~~backplate 50.~~

Page 90, amend the paragraph beginning at line 9 as follows:

Focus coating 110 lies on getter region 112 in the electron-emitting device of Fig. 21. As a consequence, coating 110 is normally perforated here to permit gas to pass through microscopic pores (not shown) in coating 110 and be sorbed by region 112. Coating 110 normally lies on at least part of the top surface of region 112 and extends over the vertical portions of region 112 into focus openings 118. Fig. 21 depicts an exemplary situation in which coating 110 is situated on largely the entire top surface of region 112 and extends down the vertical portions of region 112 but does not extend significantly beyond region 112. Coating 110 can extend significantly beyond the vertical portions of region 112 so as to cover part or all of the sidewalls of base focusing structure 108 not covered by region 112, and can even extend partway over dielectric layer 102 at the bottoms of openings 118,

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provided that coating 110 does not get so close to control electrodes 106 as to electrically interact with electrodes 106 when coating 110 consists of electrically non-insulating material.

Page 92, amend the paragraph beginning at line 16 as follows:

The electron-emitting devices of Figs. 19 - 22, including the above-mentioned variations of those devices, can be modified in various ways. The quality of the image produced by the associated light-emitting device can sometimes be enhanced by configuring each of electron-emissive regions 44 as two or more laterally separated electron-emissive portions situated opposite corresponding light-emissive regions 56 in the light-emitting device. In such a case, each focus opening 118 is likewise replaced with two or more focus openings situated respectively above the electron-emissive portions of so-divided region 44. See Schropp et al, U.S. patent application ~~Ser. No.~~ 09/302,698, filed 30 April 1999, now U.S. Patent 6,414,428 B1. Also see Figs. 38 and 39 below. Focus coating 110 and getter region 112 extend into these focus openings in the same way that coating 110 and region 112 extend into focus openings 118.

Page 97, amend the paragraph beginning at line 31 as follows:

As electron-emissive elements 104 are being formed, an excess ~~access~~ layer of the emitter-cone material accumulates on top of the structure. Using a suitable mask (not shown), the excess emitter-cone material is removed to the sides of the locations for electron-emissive regions 44. Hence, portions of the excess emitter-cone material are left in place to cover electron-emissive regions 44. These excess emitter-cone material portions cover the main control openings when each control electrode 106 consists of a main control portion and one or more thinner adjoining gate portions. A description of an implementation of the foregoing operations is provided below in connection with the process of Figs. 33a - 33e up through the stage of Fig. 33c.

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Page 99, amend the paragraph beginning at line 1 as follows:

Alternatively, the formation of electron-emissive elements 104 and base focusing ~~focus single~~ structure 108 can be done by first creating structure 108, typically according to one of the above-mentioned techniques. If a protective layer (again, not shown) is to lie between structure 108 and the underlying portions of control electrodes 106, the protective layer is formed over electrodes 106 before creating structure 108. In any event, after forming structure 108, control openings 116 and dielectric openings 114 are respectively created through electrodes 106 and dielectric layer 102 in the manner described above.

Page 101, amend the paragraph beginning at line 1 as follows:

The angled physical deposition utilized for creating getter region 112 in the process of Fig. 23 is performed in generally the same way as in the process of Fig. 11 for creating getter region 58. Particles of the getter material impinge on focus coating 110 at average tilt angle α to a line 120 extending perpendicular to (the lower or upper surface) of backplate 40 ~~backplate 50~~ during the angled physical deposition. Tilt angle α is normally at least 5°, preferably at least 10°, more preferably at least 15°. For angled evaporation, angle α is typically 16 - 17°. In any event, angle α is normally sufficiently large that getter material accumulates only partway down the vertical portions of coating 110 and thus only partway down into focus openings 118.

Page 104, amend the paragraph beginning at line 3 as follows:

The angled physical deposition for creating getter region 112 or 110/112 in the process of Fig. 25 is conducted in generally the same way as in the process of Fig. 23 for creating getter region 112 ~~or 110/112~~ and thus in generally the same as in the process of Fig. 11 for creating getter region 58. Accordingly, particles of the getter material impinge on base focusing structure 108 along paths 122 which, on the average, are instantaneously at average tilt angle α to vertical line 120. Figs. 25b and 25c illustrate two opposite azimuthal orientations for the angled deposition. These two azimuthal orientations are respectively analogous to the two azimuthal orientations represented in Figs. 23c and 23d and therefore in

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Figs. 11b and 11c. The angled physical deposition in the process of Fig. 25 is typically done by angled evaporation but can be done by angled sputtering or angled thermal spraying.

Page 109, amend the paragraph beginning at line 19 as follows:

Figs. 26 and 27 present an example in which intermediate conductive regions 126 are laterally configured so that they can be electrically accessed independently of ~~independently, of~~ control electrodes 106 as getter regions 128 are being formed. In this example, each intermediate region 126 is of much greater length than (average) width. More particularly, regions 126 extend longitudinally in the column direction, i.e., vertically in the plan view of Fig. 27, fully across the active portion of the electron-emitting device in the example of Figs. 26 and 27 to peripheral device locations where they can be electrically accessed independently of electrodes 106 during the formation of getter regions 128. Although the exemplary plan view of Fig. 27 depicts intermediate regions 126 as being spaced laterally apart from one another in the active portion of the electron-emitting device, regions 126 may be partially or fully connected together outside the active device portion to facilitate electrically accessing them.

Page 113, amend the paragraph beginning at line 1 as follows:

So-elongated getter regions 128 are then exposed through ~~to~~ corresponding elongated getter-exposing openings 130 which extend into the channels that contain the rows of electron-emissive regions 44, provided that elongating getter-exposing regions 130 in this manner does not significantly degrade the function(s), e.g., electron focusing, provided by raised section 46. If the function(s) provided by section 46 would be significantly harmed, getter regions 128 can, depending on how they are created, be exposed through smaller getter-exposing openings 130 which do not significantly extend beyond the interstitial regions located between the channels that contain the rows and columns of electron-emissive regions 44. In that case, each getter-exposing opening 130 is typically of smaller lateral area than its getter regions 128 and only exposes parts of its getter regions 128.

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Page 118, amend the paragraph beginning at line 31 as follows:

Control electrodes 106 and intermediate conductive regions 126 are formed on dielectric layer 102P. ~~layer 102.~~ The formation of regions 126 can be done partially or wholly at the same time as the formation of electrodes 106, or in separate operations. Blanket-deposition/masked-etch or/and masked-deposition/lift-off techniques can variously be utilized to form electrodes 106 and regions 126.

Page 119, amend the paragraph beginning at line 24 as follows:

Getter material is selectively deposited into getter-exposing openings 130 and onto intermediate conductive regions 126 to form getter regions 128 as shown in Fig. 29c. The selective deposition is performed by a technique which takes advantage of the electrically conductive of intermediate regions 126. Candidate techniques for this purpose are electrophoretic/dielectrophoretic deposition, electrochemical deposition, including electroplating and electroless plating. When electrophoretic/dielectrophoretic deposition or electroplating is utilized to create getter regions 128, intermediate regions 126 are electrically accessed independently of control electrodes 106 in order to provide intermediate regions 128 with a selected electrical potential during the deposition process. Electrophoretic/dielectrophoretic ~~/dielectro-phoretic~~ deposition of getter regions 128 is conducted in the manner described above for creating getter region 112 in the process of Fig. 23 and thus in the manner described above for creating getter region 58P in the process of Fig. 10. The structure of Fig. 29c is the electron-emitting device of Figs. 26 and 27.

Page 124, amend the paragraph beginning at line 11 as follows:

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Fig. 32 depicts a side cross section of a variation of the electron-emitting ~~electron-emitted~~ device of Figs. 30 and 31 in which insulating focus-isolating layer 130 underlies getter region 132 but does not extend significantly laterally beyond region 132. In fact, insulating layer 130 can undercut region 132 slightly provided that open space separates region 132 from control electrodes 106 at the under-cut locations. Fig. 32 can represent the situation in which insulating layer 130 is shaped laterally in largely the same waffle-like pattern as getter region 132 or the situation in which insulating layer 130 consists of multiple

laterally separated portions that underlie getter region 132 largely only where it overlies portions of electrodes 106.

Page 124, amend the paragraph beginning at line 26 as follows:

Electron-focusing getter region 132 is normally considerably thicker than insulating focus-isolating layer 130. In particular, region 132 is normally at least twice, preferably at least twenty times, <u>as thick as</u> ~~thicker than~~ insulating layer 130. Insulating layer 130 is normally formed with one or more of silicon oxide, silicon nitride, and boron nitride.

Page 129, amend the paragraph beginning at line 22 as follows:

Figs. 35 and 36 depict plan-view cross sections of two ways for implementing the active portion of the electron-emitting device of Fig. 34. In particular, the plan-view cross section of each of <u>Figs.</u> ~~Fig.~~ 35 and 36 is taken in the direction of the electron-emitting device along a plane extending through the sealed enclosure so as to present a plan view of part of the active portion of the electron-emitting device. Consistent with Fig. 34 and similar to the plan views of Fig. 31, the horizontal direction in the plan view of each of Figs. 35 and 36 is the column direction.

Page 130, amend the paragraph beginning at line 10 as follows:

The electron-emitting device in the FED of Fig. 34 and either Fig. 35 or Fig. 36 is formed with backplate 40 and overlying layers/regions 42 consisting of lower non-insulating region 100, dielectric layer 102, electron-emissive regions 44 arranged in rows and columns, control electrodes 106, raised section 46, a group of laterally separated electrically insulating regions 140, and a group of laterally separated getter regions 142. Once again, each electron-emissive region 44 consists of multiple electron-emissive elements 104. Raised section 46 here consists <u>of</u> ~~of an~~ electron-focusing system <u>108/110</u> formed with base focusing structure 108 and focus coating 110. Backplate 40, non-insulating region 100, dielectric layer 102, electron-emissive regions 44, and control electrodes 106 in the electron-emitting device of

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Fig. 34 and Fig. 35 or 36 are configured and constituted the same, and function the same, as ~~same as~~ in the electron-emitting device of Figs. 19 and 20.

Page 136, amend the paragraph beginning at line 14 as follows:

Fig. 38 illustrates a side cross section of another variation of the electron-emitting device of Fig. 34 and either Fig. 35 or Fig. 36. Fig. 39 depicts a side cross section of a corresponding variation of the electron-emitting device of Fig. 37. In the variations of Figs. 38 and 39, each of electron-emissive regions 44 ~~regions 144~~ is configured as two laterally separated electron-emissive portions 44A and 44B. Each electron-emissive portion 44A or 44B is exposed through a corresponding focus opening 118A or 118B extending through (the thickness of) base focusing structure 108. Although not shown in the cross sections of Figs. 38 and 39, each pair of focus openings 118A and 118B are situated across a corresponding single one of light-emissive regions 56 in the light-emitting device.

Page 136, amend the paragraph beginning at line 29 as follows:

Focus coating 110 extends partway down into focus openings 118A and 118B in the electron-emitting device of each of Figs. 38 and 39 in the same way that coating 110 extends down into focus openings ~~opening~~ 118 in the electron-emitting devices of Figs. 36 and 37. Hence, coating 110 is still electrically decoupled from control electrodes 106. See Schropp et al, U.S. patent application ~~Ser. No.~~ 09/302,698, cited above, regarding the configuration of electron-emissive regions 44 in the manner shown in Figs. 38 and 39.

Page 137, amend the paragraph beginning at line 27 as follows:

The usage of two getter regions 142 in the examples of Figs. 38 and 39 in place of one getter region 142 in the examples of Figs. 34 - 37 is arbitrary. The examples ~~example~~ of Fig. 38 and 39 can be modified to have one getter region 142 for each region 142 in the examples ~~example~~ of Fig. 34 - 37. Similarly, the examples of Figs. 34 - 37 can be modified to have two or more getter regions 142 situated side by side for each getter ~~current~~ region 142 now shown in the examples of Figs. 34 - 37.

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Page 142, amend the paragraph beginning at line 1 as follows:

Alternatively, insulating regions 140 can be formed by subjecting the portions of control electrodes 106 exposed through openings 144 to a suitable oxidizing or nitriding agent, possibly ~~possible~~ in the presence of heat. Regions 140 then consists of metal oxide or metal nitride. Excess electron-emissive material portions 146 cover electron-emissive regions 44 during this alternative so as to prevent regions 44 from being damaged. Any metal oxide or nitride that forms in focus openings 118 to the sides of excess portions 146 is generally tolerable.

Page 147, amend the paragraph beginning at line 22 as follows:

Either of the preceding techniques can (as appropriate) be utilized to improve the adhesion of any of getter regions 112, 110/112, 128, 132, and 142 to the underlying surface in the electron-emitting devices of Figs. 19 - 22, 26 - 28, 30 - 32, and 34 - 39, including the above-mentioned variations of these devices. That is, a low-melting-point material can be mixed with, or provided as an underlying adhesion layer to, ~~layer, to~~ the getter material of any of regions 112, 110/112, 128, 132, and 142, or a precursor to any of regions 112, 110/112, 128, 132, and 142, after which the partially fabricated electron-emitting backplate structure containing the getter and low-melting-point materials is heated to a temperature high enough to melt the low-melting-point material. During the subsequent cooldown, the low-melting-point material causes the getter material of each such getter region 112, 110/112, 128, 132, and 142, or the precursor to each such region 112, 110/112, 128, 132, and 142, to be securely bonded to the underlying surface. Candidates for the low-melting-point material are metals such as indium, tin, bismuth, and barium, including alloys of one or more of these metals, especially when the getter material is metal.

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Page 148, amend the paragraph beginning at line 15 as follows:

To implement the technique of mixing the low-melting-point material with the getter material, the low-melting-point and getter materials are normally simultaneously deposited on the surface on which each getter region 58, 112, 110/112, 128, 132, or 142, or a precursor to each region 58, 112, 110/112, 128, 132, or 142, is to be formed. For this purpose, the low-

melting-point material can be provided from the same source (or sources) as the getter material by mixing the low-melting-point material with the getter material prior to the deposition. The low-melting-point material can, in some cases, be provided from a separate source than the getter material during the simultaneous deposition of the getter and low-melting-point materials. When separate sources are utilized for depositing the getter and low-melting-point materials, the low-melting-point material is typically deposited by the same technique, e.g., evaporation, sputtering, thermal spraying, electrophoretic/dielectrophoretic deposition, electrochemical deposition, and so on, as that utilized to deposit the getter material. Regardless of whether separate sources or one or more common sources are utilized, the getter and low-melting-point materials are mixed together during the deposition.

Page 149, amend the paragraph beginning at line 7 as follows:

When the low-melting-point material is provided as a separate adhesion layer on the surface underlying any of getter regions 58, 112, 110/112, 128, 132, and 142, or a precursor to any of regions 58, 112, 110/112, 128, 132, and 142, the low-melting-point adhesion layer is typically deposited by the same technique as, or a similar technique to, that utilized to deposit the getter material. For example, in the processes ~~process~~ of Figs. 11, 18, 23, and 25 where the getter material is deposited by angled physical deposition, the low-melting-point adhesion layer is typically deposited by angled physical deposition. Particles of both the getter and low-melting-point materials impinge on the deposition surface at tilt angle α.

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